



Launch Mission Execution Forecast

Mission: Atlas V USSF-8

Issued: 18 Jan 2022 / 0800L (1300Z)

Valid: 21 Jan 2022 / DURING WINDOW



Forecast Discussion: Continued pleasant weather is expected through Thursday as high pressure migrates over the peninsula and into the western Atlantic. The forecast becomes increasingly complex late in the week as a cold front approaches the area on Friday. Forecast models now indicate the potential for an area of low pressure to develop over the Gulf of Mexico and ride eastward along the front – resulting in increased chances of showers and perhaps even thunderstorms beginning during or after the launch window. Given the unusual uncertainty in the weather pattern, little change has been made to the forecast; however, it should be noted that significant adjustments may become necessary with future updates. At this time, the primary concerns for launch day remain the Cumulus Cloud and Thick Cloud Layer Rules as it appears the best chance for showers and storms will hold off until after the launch window. Breezy north winds are forecast to develop on the backside of the front Saturday, drawing in drier air into the region and resulting in slightly more favorable launch conditions in the event of a 24-hour delay.

Launch Day	Probability of Violating Weather Constraints						
	40%	Primary Concerns: Cumulus Cloud Rule, Thick Cloud Layer Rule					
	Weather Conditions					Additional Risk Criteria	
	Weather/Visibility:	Isolated Showers / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Solar Activity: Low
	Temp/Humidity:	73°F / 68%	Cumulus	Scattered	2,500	8,000	
Ground Winds (230'):	270° 12 - 16 knots	Cirrostratus	Broken	18,000	22,000		
24-Hour Delay	Probability of Violating Weather Constraints						
	30%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions					Additional Risk Criteria	
	Weather/Visibility:	None / 7 mi.	Type	Coverage	Base (ft)	Tops (ft)	Solar Activity: Low
	Temp/Humidity:	64°F / 62%	Cumulus	Scattered	2,500	8,000	
Ground Winds (230'):	010° 20 - 24 knots	Alto cumulus	Scattered	12,000	16,000		
Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear and solar activity.							
Next Forecast Will Be Issued		19 Jan 2022					